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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,409	08/06/2003	Mark Haines	200210234-1	1431

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EXAMINER

GORDON, RAQUEL YVETTE

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AT

Office Action Summary

Application No.

10/635,409

Applicant(s)

HAINES ET AL.

Examiner

Raquel Y. Gordon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 9-16, 19, 21-28, 31-36, 39 and 40 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 17, 18, 20, 29, 30, 37 and 38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/6/2003
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7, 9-16, 19, 21-28, 31-36, 39, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoisington et al. (US 4788556). Hoisington et al. teach every element of the instant claims including:

1. A filter for a printhead assembly, the filter comprising: a frame (see fig 2) having an opening and a fluid passage (28) communicated with the opening formed therein; filter material enclosing (34) the opening and the fluid passage of the frame; a first fluid port communicated with the fluid passage of the frame; a permeable material (30, 31) communicated with the first fluid port; and a second fluid port (29) spaced from the first fluid port and communicated with the fluid passage of the frame.

2. The filter of claim 1, wherein the fluid passage of the frame is adapted to direct air from the first fluid port to the second fluid port (21);

3. The filter of claim 1, wherein the permeable material is adapted to allow air to pass therethrough before the permeable material is wetted by liquid ink and prevent air from passing therethrough when the permeable material is wetted by the liquid ink (col 3, lines 23-66);

4. The filter of claim 1, wherein the permeable material includes a porous plug fitted within the first fluid port (26);

7. The filter of claim 1, wherein the filter material is secured to the frame around a perimeter of the opening (see element 34, and fig 2);

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9. The filter of claim 1, wherein the filter material is adapted to allow liquid ink to pass therethrough, and wherein the filter material is adapted to prevent air from passing therethrough when the filter material is wetted by the liquid ink (col 3, lines 23-66);

10. The filter of claim 9, wherein the filter material is adapted to allow air to pass therethrough before the filter material is wetted by the liquid ink (col 3, lines 23-66);

11. The filter of claim 1, wherein the frame has a first face and a second face opposite the first face, wherein the opening of the frame communicates with the first face and the second face, and wherein the filter material is provided on the first face and the second face of the frame (see element 31 in fig 2 which shows the different first and second faces on which element 34 is placed);

12. The filter of claim 1, wherein the frame has a substantially rectangular shape, and wherein the first fluid port and the second fluid port extend from a side of the substantially rectangular shape (see fig 2);

Method claims 13- 16, 19 and 21-24 are anticipated by the apparatus claims and are rejected therewith claims 1-12;

25. A printhead assembly, comprising: a carrier (27) having a fluid manifold defined therein; a printhead die (11) mounted on the carrier and communicated with the fluid manifold; and a fluid delivery assembly coupled with the carrier and including a filter including a frame having an opening and a fluid passage (28) communicated with the opening formed (26) therein, filter material enclosing the opening and the fluid passage of the frame (see fig 2), first and second fluid ports (29) communicated with the fluid passage, and a permeable material (30 and 31) communicated with the first fluid port, wherein the second fluid port of the filter communicates with the fluid manifold of the carrier (see fig 2);

26. The printhead assembly of claim 25, wherein the fluid passage of the frame is adapted to direct air from the first fluid port to the second fluid port (21);

27. The printhead assembly of claim 25, wherein the permeable material of the filter is adapted to allow air to pass therethrough before the permeable material is wetted by liquid ink and prevent air from passing therethrough when the permeable material is wetted by the liquid ink (col 3, lines 23-66);

28. The printhead assembly of claim 25, wherein the permeable material of the filter

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includes a porous plug fitted within the first fluid port (26)

31. The printhead assembly of claim 25, wherein the filter material of the filter is adapted to allow liquid ink to pass therethrough, and wherein the filter material of the filter is adapted to prevent air from passing therethrough when the filter material is wetted by the liquid ink (col 3, lines 23-66);

32. The printhead assembly of claim 31, wherein the filter material of the filter is adapted to allow air to pass therethrough before the filter material is wetted by the liquid ink (col 3, lines 23-66);

Method claims 33- 40 are anticipated by the apparatus claims and are rejected therewith claims 25-23.

Allowable Subject Matter

Claims 5, 6, 8, 17, 18, 20, 29, 30, 37 and 38 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Reasons for Indication of Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: The following claimed limitations are not taught by the prior art of record:

5. The filter of claim 4, wherein the porous plug is impregnated with a clogging agent;

6. The filter of claim 1, wherein the permeable material includes a mesh material;

8. The filter of claim 1, wherein the filter material has a mesh size in a range of approximately 2 microns to approximately 20 microns;

17. The method of claim 16, wherein the porous plug is impregnated with a clogging agent;

18. The method of claim 13, wherein communicating the permeable material with the first fluid port includes communicating a mesh material with the first fluid port;

20. The method of claim 13, wherein the filter material has a mesh size in a range of approximately 2 microns to approximately 20 microns;

29. The printhead assembly of claim 28, wherein the porous plug is impregnated with a clogging agent;

30. The printhead assembly of claim 25, wherein the permeable material of the filter includes a mesh material;

37. The method of claim 36, wherein the porous plug is impregnated with a clogging agent; and

38. The method of claim 33, wherein the permeable material of the filter includes a mesh material.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Raquel Y. Gordon, whose telephone number is (571) 272-2145. The Examiner can normally be reached on M Tu Th and F 8:30-6:00.

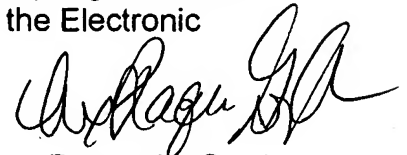
If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. A fax number is available upon request.

Any inquiry of a general nature or relating to the status of this application or proceeding may be directed to the Examiner or Supervisor.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raquel Y. Gordon
Primary Examiner
Art Unit 2853
February 17, 2005

**RAQUEL GORDON
PRIMARY EXAMINER**